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| EXAMINER |
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CHEN, QING

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| ART UNIT | PAPER NUMBER |
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2191

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|----------------------------------------|------------|---------------|
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------------------|--|
| Office Action Summary | Application No. 10/736,065 | Applicant(s) GUYETTE, THOMAS MICHAEL | |
| | Examiner Qing Chen | Art Unit 2191 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial Office action based on the application filed on December 15, 2003.
2. **Claims 1-20** are pending.

Drawings

3. The drawings are objected to because:
 - The word "use" should be changed to "user" in Figure 2, Element 70.
 - The word "Dimensions" is misspelled in Figure 5, Element 124.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
- The specification contains the following typographical errors:
 - The whitespace character between the letters “c” and “a” in the word “can” should be deleted on page 3, line 13.
 - The phrase “may used” should presumably read “may be used” on page 9, line 7.
 - The word “read” should presumably read “edit” on page 9, line 21.
 - The word “whether” should presumably read “when” on page 9, line 23.
 - The phrase “each location” should presumably read “same locations” on page 10, line 23.

Appropriate correction is required.

Claim Objections

5. **Claims 2-4, 6, 8-10, 12, 14-16, 18, and 20** are objected to because of the following informalities:
- **Claims 2, 4, 6, 8, 10, 12, 14, 16, and 18** recite the limitation “said operational characteristic.” Applicant is advised to change this limitation to read “said at least one operational characteristic” for the purpose of providing it with proper explicit antecedent basis.

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- **Claims 3, 4, 6, 9, 10, 12, 15, 16, and 18** recite the limitation “said design guideline.”

Applicant is advised to change this limitation to read “said at least one design guideline” for the purpose of providing it with proper explicit antecedent basis.

- **Claim 20** recites the limitation “said computer program.” Applicant is advised to change this limitation to read “said at least one computer program” for the purpose of providing it with proper explicit antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claims 1-20** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The result of **Claims 1-20** is directed to the act of “determining,” which does not appear to be a tangible result so as to constitute a practical application of the idea. The act of “determining” is merely a thought or an abstract idea and does not appear to produce a tangible result even if the step of determination does occur, since the result of that determination is not conveyed in the real world. The result is a determination, which is neither used in a disclosed practical application nor made available for use in a disclosed practical application. It also does

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not appear that the usefulness of the determination can be realized from the claimed steps to support a disclosed specific, substantial, and credible utility so as to produce a useful result.

Therefore, the claims do not meet the statutory requirement of 35 U.S.C. § 101, since the claims are not directed to a practical application of the § 101 judicial exception producing a result tied to the physical world.

Claims 7-12 recite computer readable medium as a claimed element. However, it is noted that the specification does not provide an explicit definition of what constitutes a computer readable medium. Furthermore, the specification describes that programs defining the function of the present invention can be delivered to a computer including information conveyed to a computer through communication media for example using baseband signaling or broadband signaling techniques, including carrier wave signaling techniques, such as over computer or telephone networks via a modem (*see Page 15: 12-15*). Consequently, the computer readable medium can be reasonably interpreted as carrying electrical signals.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism *per se*, and as such are non-statutory natural phenomena. *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-14 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claims 13-18 contain “means-plus-function” limitations and appear to be systems. However, it is noted that the specification does not disclose any specific corresponding structure or equivalents thereof. The recited means appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under § 101. Therefore, these claim limitations can be reasonably interpreted as computer program modules—software *per se*. The claims are directed to systems of functional descriptive material *per se*, and hence non-statutory.

The claims constitute computer programs representing computer listings *per se*. Such descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element, which defines structural and functional interrelationships between the computer program and the rest of the computer, that permits the computer program’s functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 20 is directed to a computer data signal embodied in a carrier wave. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism *per se*, and as such are non-statutory natural phenomena. *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-14 (1853).

Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1, 2, 5-8, 11-14, and 17-20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Fagg, III et al.** (US 5,960,419).

As per **Claim 1**, **Fagg, III et al.** disclose:

- inputting at least one operational characteristic of a component of said software system under development (*see Column 5: 6-10, "The index lists the names of the program blocks on the display for selection by the user, for adding new program blocks, for opening a block for editing in the workspace or for entry of a reference to an indexed block into an open block."*);
- providing at least one question regarding said at least one operational characteristic (*see Column 6: 14-17, "The user is asked a first question from the set as the execution program 28 provides a choice of answers to the first question for the user."*);

- inputting at least one answer to said at least one question (*see Column 6: 23, "The user's answer to the first question is recorded ..."*); and
- determining, responsive to said at least one answer, at least one design guideline related to said at least one operational characteristic (*see Figure 8; Column 21: 54-57, "Main Loop is responsible for loading an application file, producing results for a user from the execution of an application file, manipulating specific files and exiting the execution system."*).

As per **Claim 2**, the rejection of **Claim 1** is incorporated; and Fagg, III et al. further disclose:

- wherein said at least one operational characteristic comprises a configuration value associated with said component of said software system under development (*see Column 5: 16-18, "For example, the question block in FIG. 2 contains a reference to a program block EE Reference shown in the index."*).

As per **Claim 5**, the rejection of **Claim 1** is incorporated; and Fagg, III et al. further disclose:

- inputting said at least one question, wherein said at least one question reflects a system design of said software system under development, and inputting a configuration for a presentation flow of said at least one question (*see Column 5: 18-22, "Whatever name is currently in the EE Reference block will be shown in the question when it is asked. The user will supply the EE name for the block in response to an earlier question from the application*

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program prompting for the name.”; Column 6: 12-14, “... the execution program 28 provides a set of questions for completing the task at hand.”).

As per **Claim 6**, the rejection of **Claim 1** is incorporated; and Fagg, III et al. further disclose:

- wherein said determining said at least one design guideline further comprises associating said at least one design guideline with said at least one operational characteristic of said component (*see Figure 8; Column 21: 54-57, “Main Loop is responsible for loading an application file, producing results for a user from the execution of an application file, manipulating specific files and exiting the execution system.”).*

Claims 7, 8, 11, and 12 are computer program product claims corresponding to the method claims above (Claims 1, 2, 5, and 6) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 1, 2, 5, and 6.

Claims 13, 14, 17, and 18 are system claims corresponding to the method claims above (Claims 1, 2, 5, and 6) and, therefore, are rejected for the same reasons set forth in the rejections of Claims 1, 2, 5, and 6.

Claim 19 is a system claim corresponding to the method claim above (Claim 1) and, therefore, is rejected for the same reason set forth in the rejection of Claim 1.

Claim 20 is a computer data signal claim corresponding to the method claim above (Claim 1) and, therefore, is rejected for the same reason set forth in the rejection of Claim 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 3, 4, 9, 10, 15, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fagg, III et al.** (US 5,960,419) in view of **Swartz et al.** (US 6,236,994).

As per **Claim 3**, the rejection of **Claim 1** is incorporated; however, **Fagg, III et al.** do not disclose:

- wherein said at least one design guideline comprises a metadata tag to be associated with said at least one operational characteristic.

Swartz et al. disclose:

- wherein said at least one design guideline comprises a metadata tag to be associated with said at least one operational characteristic (*see Column 10: 22-24, "... data analysis and review block 90 includes a data review subcomponent having access to the analysis results & meta data stored in database 94 ... "*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of **Swartz et al.** into the teaching of **Fagg, III et al.** to include wherein said at least one design guideline comprises a metadata tag to be associated with said at least one operational characteristic. The modification would be obvious

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because one of ordinary skill in the art would be motivated to provide information integration with knowledge linkage, visualization and utilization of structured, unstructured and work practice data and metadata (*see Swartz et al. – Column 5: 34-38*).

Claims 9 and 15 are rejected for the same reason set forth in the rejection of Claim 3.

As per **Claim 4**, the rejection of **Claim 1** is incorporated; however, Fagg, III et al. do not disclose:

- wherein said at least one design guideline comprises a name of a data store to be used to store said at least one operational characteristic.

Swartz et al. disclose:

- wherein said at least one design guideline comprises a name of a data store to be used to store said at least one operational characteristic (*see Column 10: 26-28, "The analysis results, and output thereof, are provided by subcomponent 96, which processes the meta data stored in the database ... "*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Swartz et al. into the teaching of Fagg, III et al. to include wherein said at least one design guideline comprises a name of a data store to be used to store said at least one operational characteristic. The modification would be obvious because one of ordinary skill in the art would be motivated to provide information integration with knowledge linkage, visualization and utilization of structured, unstructured and work practice data and metadata (*see Swartz et al. – Column 5: 34-38*).

Claims 10 and 16 are rejected for the same reason set forth in the rejection of Claim 4.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. **Hekmatpour** (US 5,644,686) discloses a domain independent expert system and method employing inferential processing within a hierarchically-structured knowledge base and non-inferential accessing of information within one or more associated utilities.

B. **Iyengar et al.** (US 6,018,627) disclose a tool-independent business application development system.

C. **Bowman-Amuah** (US 6,405,364) discloses a system for building systems in a development architecture framework.

D. **Barry et al.** (US 6,615,258) disclose a system for providing data management services over the Internet.

E. **Gilman et al.** (US 6,725,447) disclose a system and method for development and use of medical logical modules in the Arden syntax file format.

F. **Gillis** (US 6,871,340) discloses a method and apparatus for the creating of a software tool, such as a Wizard.

G. **Konnorsman** (US 6,877,153) discloses using information technology in support of professional and managerial work processes.

H. Gail et al. (US 7,171,585) disclose encoding subsets of possible questions and answers of the repository as directed graphs, and when the repository is remote from the user, downloading the subsets to substantially reduce the number of transmissions between the user and the remote repository.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

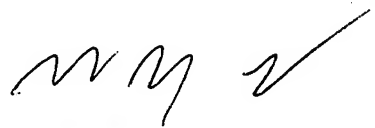
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WEI ZHEN
SUPERVISORY PATENT EXAMINER

QC / *QC*
February 8, 2007